



**Rules and
Regulations for
the Classification
of Ships, July 2011**

Notice No. 5

Effective Date of Latest
Amendments:

See page 1

Issue date: March 2012

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RULES AND REGULATIONS FOR THE CLASSIFICATION OF SHIPS, *July 2011*

Notice No. 5

This Notice contains amendments within the following Sections of the *Rules and Regulations for the Classification of Ships, July 2011*. The amendments are effective on the dates shown:

<i>Part</i>	<i>Chapter</i>	<i>Section</i>	<i>Effective date</i>
1	2	2, 3	1 January 2012
1	3	1, 2, 3, 4, 5, 6, 7, 8, 9	1 January 2012
3	16	11	1 January 2012

It will be noted that the amendments also include corrigenda, which are effective from the date of this Notice.

The *Rules and Regulations for the Classification of Ships, July 2011* are to be read in conjunction with this Notice No. 5. The status of the Rules is now:

Rules for Ships	Effective date:	July 2011
Notice No. 1	Effective date:	1 July 2011
Notice No. 2	Effective date:	1 January 2012 & Corrigendum
Notice No. 3	Effective date:	1 January 2012
Notice No. 4	Effective date:	1 January 2012
Notice No. 5	Effective date:	1 January 2012

Part 1, Chapter 2
Classification Regulations

Effective date 1 January 2012

■ Section 2
Character of classification and class notations

2.3 Class notations (hull)

2.3.11 *IWS. This notation (In-water Survey) may be assigned to a ship where the applicable requirements of LR's Rules and Regulations are complied with, see Ch 3,4.3; Pt 3, Ch 1,5.2 and 5.3; Pt 3, Ch 2,3.5; Pt 3, Ch 13,2.8 and Pt 5, Ch 6,3.12. The notation will be withdrawn for ESP ships upon reaching 15 years of age.

2.7 Descriptive notes

(Part only shown)

2.7.3 Where LR's ShipRight procedures for the following have been applied on a voluntary basis, then a descriptive note will, at the Owner's request, be entered in column 6 of the Register Book, preceded by the word ShipRight (see also ShipRight Procedures Overview, Pt 3, Ch 16 and Pt 5, Ch 21):

BWMP Ballast Water Management Plan

DIST(M,AB,I,IG) Machinery suitable for operation on distillate fuels
M = main engine(s)
AB = auxiliary engines and boiler
I = incinerator
IG = inert gas generator
This notation will be assigned where the specified machinery items are suitable for operation on distillate fuel.
For example, the note **DIST(AB,IG)** will indicate that the auxiliary engines, auxiliary boiler and IG system are suitable for operation on distillate fuels.

IHM VECS Inventory of Hazardous Materials Vapour Emission Control System
This notation will be assigned to a ship that has a vapour emission control system fitted which has been designed and constructed in accordance with the requirements of USCG 46, CFR 39 or the IMO Standards for Vapour Emission Control Systems (MSC Circular 585). If a ship has been assigned the ECO notation then it will not be eligible for the VECS Descriptive Note. Instead, VECS will be referenced in the ECO notation, i.e. ECO(VECS).

VECS-L Vapour Emission Control System – Lightering
This notation will be assigned to a ship that has a vapour emission control system that complies with the requirements for the VECS Descriptive Note and which has also been designed and constructed to meet the requirements for vapour balancing in accordance with USCG 46, CFR 39.40 for service vessels. If a ship has been assigned the ECO notation then it will not be eligible for the VECS-L Descriptive Note. Instead, VECS for lightering will be referenced in the ECO notation, i.e. ECO(VECS-L).

■ Section 3
Surveys – General

3.5 Existing ships – Periodical Surveys

3.5.3 The Owner should notify LR whenever a ship can be examined in dry-dock or on a slipway. A minimum of two Docking Surveys are to be held in each five-year Special Survey period and the maximum interval between successive Docking Surveys is not to exceed three years. One of the two Docking Surveys required in each five year period is to coincide with the Special Survey. Consideration may be given in exceptional circumstances to an extension of this interval not exceeding three months beyond the due date. A definition of 'exceptional circumstances' is given in 3.5.9. The Classification Committee may accept an In-water Survey in lieu of the intermediate docking between Special Surveys, see Ch 3, 4.3.

An In-water Survey shall not be permitted for ships over of 15 years of age and over that are assigned the notation ESP. A Docking Survey is considered to coincide with the Special Survey when held within the 15 months prior to the due date of the Special Survey.

Where the Special Survey of the hull is carried out on a Continuous Survey basis, as given in 3.5.14, the survey in dry-dock may be held at any time within the five-year cycle.

3.8 Withdrawal/Suspension of class

3.8.10 When a client fails to pay all undisputed portions of invoices for the services by the contractual due date then class will be liable to be suspended or withdrawn at the discretion of the Classification Committee and a corresponding notation will be assigned. In these cases, a period of notice not exceeding 3 months may be given, prior to any suspension or withdrawal of class.

Existing paragraphs 3.8.10 and 3.8.11 have been renumbered 3.8.11 and 3.8.12.

Part 1, Chapter 3

Periodical Survey Regulations

Effective date 1 January 2012

■ Section 1

General

1.7 Thickness measurement at surveys

~~1.7.3 For non-ESP ships less than 500 gross tons and all fishing vessels, the designated Surveyor, who has received specific training and been qualified by LR, may carry out thickness measurements.~~

1.7.3 Thickness measurements are normally to be taken by means of ultrasonic test equipment and are to be carried out by a firm approved in accordance with LR's *Approval for Thickness Measurement of Hull Structure*. For non-ESP ships less than 500 gross tons and all fishing vessels, a suitably qualified exclusive Surveyor (where available) may carry out thickness measurements. On all other occasions, an approved firm is to carry out the thickness measurements.

~~1.7.4 Thickness measurements are normally to be taken by means of ultrasonic test equipment and are to be carried out by a firm approved in accordance with Lloyd's Register's *Approval for Thickness Measurement of Hull Structure*.~~

Existing paragraphs 1.7.5 to 1.7.12 are to be renumbered 1.7.4 to 1.7.11.

■ Section 2

Annual Surveys – Hull and machinery requirements

2.2 Annual Surveys

~~2.2.28 The requirements of 3.2.4, 3.2.5, 5.3.3 and 5.3.4 regarding the survey of water ballast spaces are also to be complied with as applicable.~~

2.2.28 The examination of salt-water ballast tanks is to be carried out as follows:

- (a) Salt-water ballast tanks, other than independent double bottom ballast tanks, on all ships (excluding oil tankers and chemical tankers) where it has been identified at a previous Special Survey or Intermediate Survey that:
 - (i) A hard protective coating has not been applied from the time of construction; or
 - (ii) A soft or semi-hard coating has been applied; or
 - (iii) A hard protective coating is found to be in POOR condition, as defined in 1.5, and the hard protective coating is not repaired to the satisfaction of the Surveyor.

If the conditions listed above are applicable to independent double bottom ballast tanks, then these tanks may be subject to examination at the Annual Survey at the discretion of the Surveyor.

- (b) Salt-water ballast tanks on oil tankers (including ore/oil and ore/bulk/oil ships) and chemical tankers where it has been identified at a previous Special Survey or Intermediate Survey that:
 - (i) A hard protective coating has not been applied from the time of construction; or
 - (ii) A soft or semi-hard coating has been applied; or
 - (iii) The hard protective coating is found to be in less than GOOD condition, as defined in 1.5, and the hard protective coating is not repaired to the satisfaction of the Surveyor.
- (c) The examination of the salt-water ballast tanks, in accordance with the above, is to include thickness measurements to confirm the condition of the hull structure.

2.2.29 The Surveyor is to carry out an examination and thickness measurement of structure identified at the previous Special Survey or Intermediate Survey as having substantial corrosion, as defined in 1.5. This requirement does not apply to cargo tanks of oil tankers and chemical tankers. The extent of thickness measurements is to be ~~increased~~ in accordance with the appropriate tables in Sections 5, 6, 7 or 8, as applicable, to determine the full extent of the corrosion pattern. The survey will not be considered complete until these additional thickness measurements have been carried out.

2.2.34 For **general dry cargo ships**, in addition to the applicable requirements of 2.2.1 to 2.2.29, the following are required for ships over 10 years of age:

- (a) Overall survey of one forward and one after cargo hold and their associated 'tween deck spaces.
- (b) ~~Where~~ **When** considered necessary by the Surveyor, thickness measurement is to be carried out. ~~Where~~ **If** the results of thickness measurement indicate substantial corrosion, the extent of thickness measurement ~~should~~ **is to** be in accordance with Section 5, Table 3.5.6. The survey will not be considered complete until these additional thickness measurements have been carried out.

(Part only shown)

2.2.35 For **general dry cargo ships**, in addition to the applicable requirements of 2.2.1 to 2.2.29, the following are required for ships over 15 years of age:

- (e) ~~Where~~ **When** considered necessary by the Surveyor, thickness measurement is to be carried out. ~~Where~~ **If** the results of thickness measurement indicate substantial corrosion, the extent of thickness measurement ~~should~~ **is to** be in accordance with Table 3.5.6 in Section 5. The survey will not be considered complete until these additional thickness measurements have been carried out.

Table 3.2.1 Bulk carriers – Annual Surveys (Part only shown)

NOTES The requirements in this Table apply to both single skin and double skin ships, unless stated otherwise. - Where the Survey reveals the need for remedial measures, then the Survey is to be extended to include all cargo holds. - Close-up Survey is required within the area of the lower one-third of the length of the cargo hold side shell frames. - Where the Survey reveals the need for remedial measures, the Survey is to be extended to include a Close-up Survey of all of the cargo hold side shell frames and adjacent shell plating of that cargo hold, as well as a Close-up Survey of sufficient extent of all remaining cargo holds. - When considered necessary by the Surveyor, thickness measurement is to be carried out. ~~Where~~ If the results of thickness measurement indicate substantial corrosion, the extent of thickness measurement ~~should be~~ is to be in accordance with Section 6, Tables 3.6.5, 3.6.6, 3.6.7, 3.6.8, 3.6.9 and 3.6.10 as applicable. The survey will not be considered complete until these additional thickness measurements have been carried out. - Where protective coatings are found in ~~good~~ GOOD condition, as defined in 1.5, the extent of the Close-up Survey ~~and thickness measurement~~ may be specially considered. ~~Prior~~ When considered necessary by the Surveyor, thickness measurement is to be carried out. However, prior to any coating or recoating of cargo holds, scantlings are to be confirmed by thickness measurement with the Surveyor in attendance.	
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Section 3 Intermediate Surveys – Hull and machinery requirements

3.2 Intermediate Surveys

3.2.2 A general examination of salt-water ballast tanks is to be carried out as required by 3.2.6 and 3.2.7. For ships other than oil tankers and chemical tankers, if such examinations reveal no visible structural defects then the examination may be limited to a verification that the protective coating remains in GOOD or FAIR condition as defined in 1.5. ~~When considered necessary by the Surveyor, thickness measurement of the structure is to be carried out.~~

3.2.4 For **oil tankers** (including ore/oil and ore/bulk/oil ships) and **chemical tankers**, ~~salt water ballast tanks are to be examined and gauged as necessary at Annual Surveys where:~~

- A hard protective coating has not been applied from the time of construction; or
- A soft or semi-hard coating has been applied; or
- Substantial corrosion is found within the tank; or
- The hard protective coating is found to be in less than GOOD condition, as defined in 1.5, and the hard protective coating is not repaired to the satisfaction of the Surveyor.

the condition of the corrosion prevention system identified during the Survey may result in the salt-water ballast tanks being subject to further examination at Annual Surveys, in accordance with 2.2.28.

3.2.5 For salt-water ballast tanks on those ships not listed in 3.2.4, ~~where a hard protective coating is found to be in POOR condition, as defined in 1.5, and it has not been repaired, where a soft or semi-hard coating has been applied or where a protective coating was not applied from the time of construction the following requirements are applicable:~~

- For salt water ballast tanks, other than independent double bottom tanks, maintenance of class will be subject to the spaces in question being examined and gauged as necessary at Annual Surveys.
- For independent salt water double bottom tanks, maintenance of class may, at the discretion of the Surveyor, be subject to the spaces in question being examined and gauged as necessary at Annual Surveys.

NOTE

~~Independent double bottom tanks are those double bottom tanks which are separate from topside tank, side tanks or deep tanks.~~

the condition of the corrosion prevention system identified during the Survey may result in the tanks being subject to further examination at Annual Surveys, in accordance with 2.2.28. For independent double bottom ballast tanks, the examination at Annual Surveys will be at the discretion of the Surveyor.

3.2.14 For **bulk carriers**, in addition to the applicable requirements of 3.2.1 to 3.2.9, the following are to be dealt with on ships over five years of age:

- ~~Examination of~~ Overall Survey, Close-up Survey and thickness measurements of cargo holds in accordance with Table 3.3.1.
- The thickness measurement requirements of 3.2.8 ~~are to be complied with. In areas where substantial corrosion, as defined in 1.5, has been noted then additional measurements are to be carried out in accordance with Tables 3.6.4, 3.6.5, 3.6.6 and 3.6.7. The survey will not be considered complete until these additional thickness measurements have been carried out.~~

For ore carriers, in addition to the requirements of 3.2.7, the examination of salt-water ballast tanks is to include the following:

- All web frame rings in one ballast wing tank.
 - One deck transverse in each remaining ballast wing tank.
 - Both transverse bulkheads in one ballast wing tank.
 - One transverse bulkhead in each remaining ballast wing tank.
- Thickness measurement of those areas subject to Close-up Survey, to determine both general and local corrosion levels. The extent of thickness measurement may be specially considered provided the Surveyor is satisfied that there is no structural diminution and the protective coating, where provided, remains in GOOD condition, as defined in 1.5.
 - For ore carriers, in addition to the requirements of 3.2.7, the examination of salt water ballast tanks is to include the following:
 - All web frame rings in one ballast wing tank.
 - One deck transverse in each remaining ballast wing tank.
 - Both transverse bulkheads in one ballast wing tank.

Table 3.3.1 Bulk carriers – Intermediate Surveys (Part only shown)

NOTES	
The requirements in this Table apply to both single skin and double skin ships, unless stated otherwise.	
1.	For single skin ships, where considered necessary by the Surveyor as a result of the Overall and Close-up Survey, the Survey is to be extended to include a Close-up Survey of all of the side shell frames and adjacent shell plating of that cargo hold, as well as a Close-up Survey of sufficient extent of all remaining cargo holds.
2.	For double skin ships, where considered necessary by the Surveyor as a result of the Overall Survey, the Survey is to be extended to include a Close-up Survey of those areas of structure in cargo holds selected by the Surveyor.
3.	Thickness measurement is to be carried out of sufficient extent to determine the level of corrosion of those areas subject to Close-up Survey. ~~Where~~ If the results of thickness measurement indicate substantial corrosion, the extent of thickness measurement ~~should~~ is to be in accordance with Section 6, Tables 3.6.5 to 3.6.10 as applicable. The survey will not be considered complete until these additional thickness measurements have been carried out.
4.	For ships between 5 and 10 years old where hard protective coatings in cargo holds are found to be in GOOD condition, as defined in 1.5, the extent of Close-up Survey and thickness measurement may be specially considered but not dispensed with in its entirety. Prior to any coating or recoating of cargo holds, scantlings are to be confirmed by thickness measurement with the Surveyor in attendance.

- (iv) ~~One transverse bulkhead in each remaining ballast wing tank.~~

3.2.16 For ships over 10 years old of age (other than dry cargo ships, general dry cargo ships, ships assigned ESP Notation and ships for liquefied gases), in addition to the applicable requirements of 3.2.1 to 3.2.8, an Overall Survey of selected cargo spaces is to be carried out.

Existing paragraphs 3.2.16 and 3.2.17 have been renumbered 3.2.17 and 3.2.18.

~~3.2.18~~ **3.2.19** For **general dry cargo ships**, in addition to the applicable requirements of 3.2.1 to 3.2.9, the following are required for ships over 10 years of age:

- An overall survey of all cargo holds and 'tween deck spaces.
- Where considered necessary by the Surveyor, thickness measurement is to be carried out. ~~Where~~ If the results of thickness measurement indicate substantial corrosion, the extent of thickness measurement ~~should~~ is to be in accordance with Table 3.5.6 in Section 5. The survey will not be considered complete until these additional thickness measurements have been carried out.

Existing paragraphs 3.2.19 to 3.2.21 have been renumbered 3.2.20 to 3.2.22.

Section 4 Docking Surveys and In-water Surveys – Hull and machinery requirements

4.3 In-water Surveys

4.3.5 The In-water Survey is to be carried out at an agreed geographical location under the surveillance of a Surveyor to LR, with the ship at a suitable draught in sheltered waters and with weak tidal streams and currents. The in-water visibility is to be good and the hull below the waterline is to be clean and the cleanliness of the hull below the waterline is to be clear enough to permit a meaningful examination which allows the Surveyor and diver to determine the condition of the plating, appendages and the welding. The Surveyor is to be satisfied that the method of pictorial presentation is satisfactory. There is to be good two-way communication between the Surveyor and the diver.

Section 5 Special Survey – General – Hull requirements

5.3 Examination and testing

5.3.3 For **oil tankers** (including ore/oil and ore/bulk/oil ships) and **chemical tankers**, the condition of the corrosion prevention system, where provided, is to be examined in cargo tanks and salt-water ballast tanks. ~~Thickness measurements are to be carried out as deemed necessary by the Surveyor. Ballast tanks are to be examined and gauged as necessary at Annual Surveys where:~~

- ~~A hard protective coating has not been applied from the time of construction, or~~
- ~~A soft or semi-hard coating has been applied, or~~
- ~~Substantial corrosion is found within the tank, or~~
- ~~The hard protective coating is found to be in less than GOOD condition, as defined in 1.5, and the hard protective coating is not repaired to the satisfaction of the Surveyor.~~

When considered necessary by the Surveyor, thickness measurements are to be carried out. The condition of the corrosion prevention system identified during the Survey may result in the salt-water ballast tanks being subject to further examination at Annual Surveys, in accordance with 2.2.28.

5.3.4 For those ships not listed in 5.3.3, the condition of the corrosion prevention system, where provided, in salt-water ballast tanks is to be examined. ~~Thickness measurements are to be carried out as deemed necessary by the Surveyor. Where a hard protective coating is found to be in POOR condition, as defined in 1.5, and it has not been repaired, where a soft or semi-hard coating has been applied or where a protective coating was not applied from the time of construction the following requirements are applicable:~~

- ~~For salt water ballast tanks, other than independent double bottom tanks, maintenance of class will be subject to the spaces in question being examined and gauged as necessary at Annual Surveys.~~
- ~~For independent salt water double bottom tanks, maintenance of class may, at the discretion of the Surveyor, be subject to the spaces in question being examined and gauged as necessary at Annual Surveys.~~

NOTE

Independent double bottom tanks are those double bottom tanks which are separate from topside tank, side tanks or deep tanks.

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When considered necessary by the Surveyor, thickness measurements are to be carried out. The condition of the corrosion prevention system identified during the Survey may result in the salt-water ballast tanks being subject to further examination at Annual Surveys, in accordance with 2.2.28. For independent double bottom ballast tanks, the examination at Annual Surveys will be at the discretion of the Surveyor.

5.6 Thickness measurement

5.6.4 Where substantial corrosion is identified and not rectified, this will be subject to ~~re-examination~~ examination and ~~gauging as necessary~~ thickness measurement at Annual and Intermediate Surveys.

5.6.5 ~~At each Special Survey, thickness measurements are to be taken in way of critical areas, as considered necessary by the Surveyor. Critical areas are to include locations throughout the ship that show substantial corrosion and/or are considered prone to rapid wastage.~~

5.6.5 Where considered necessary by the Surveyor, thickness measurements are to be carried out in way of critical areas. These include areas considered prone to rapid wastage.

Table 3.5.2 Tank internal examination requirements

Tank	Special Survey I (Ships 5 years old)	Special Survey II (Ships 10 years old)	Special Survey III (Ships 15 years old)	Special Survey IV and subsequent (Ships 20 years old and over)
(1) Peaks	All tanks	All tanks	All tanks	All tanks
(2) Salt water ballast, see Note 5	All tanks	All tanks	All tanks	All tanks
(3) Lubricating oil	None	None	None	One tank
(4) Fresh water	None	One tank	All tanks	All tanks
(5) Oil fuel - in way of (i) Engine Room (ii) Cargo Area	None None	None One tank	One tank Two tanks, Note 3	One tank 50% of tanks – Notes 3 and 4
NOTES - The above requirements apply to integral tanks only. - Where a selected number of tanks are examined, then different tanks are to be examined at each Special Survey on a rotational basis. - To include one deep tank, if any. - Where 50% of tanks are to be examined, a minimum of two tanks are required to be examined depending upon the overall number of tanks. - The requirements for Salt-water ballast tanks are applicable to Bilge water, Sewage and Grey water tanks.				

Table 3.5.3 Thickness measurement – General (Part only shown)

NOTES - Thickness measurement locations are to be selected to provide the best representative sampling of areas likely to be most exposed to corrosion, considering cargo and ballast history and arrangement, and condition of protective coatings. - A transverse section is to include all longitudinal members such as plating, longitudinals and girders at the deck, sides, bottom, inner bottom, hopper side and longitudinal bulkheads, where fitted. - Where the protective coating is in GOOD condition, then the extent of thickness measurements of internals may be specially considered, but not dispensed with in its entirety, at the discretion of the Surveyor. - For ships having length L less than 100 m: - the number of transverse sections required at Special Survey III may be reduced to one; - the number of transverse sections required at Special Survey IV and subsequent surveys may be reduced to two; - at Special Survey III, thickness measurements of exposed deck plating within $0,5L$ amidships may be required. - Transverse bulkhead complete including stiffening system. - The requirements for thickness measurement for bulk carriers, oil tankers (including ore/oil and ore/bulk/oil ships), chemical tankers and ships for liquefied gases are given in Sections 6, 7, 8 and 9 respectively.

Table 3.5.5 Thickness measurement – General dry cargo ships (Part only shown)

NOTES	
1.	Thickness measurement locations are to be selected to provide the best representative sampling of areas likely to be most exposed to corrosion, considering cargo and ballast history and arrangement, and condition of protective coatings.
2.	A transverse section is to include all longitudinal members such as plating, longitudinals and girders at deck, sides, bottom, inner bottom, hopper side and longitudinal bulkheads, where fitted.
3.	Where the protective coating is in GOOD condition, then the extent of thickness measurements of internals may be specially considered, but not dispensed with in its entirety, at the discretion of the attending Surveyor.
4.	For ships having length <i>L</i> less than 100 m:
(a)	the number of transverse sections required at Special Survey III may be reduced to one.
(b)	the number of transverse sections required at Special Survey IV and subsequent surveys may be reduced to two.
5.	For areas in cargo holds and salt-water ballast tanks subject to Close-up Survey, the thickness measurements may be dispensed with provided the Surveyor is satisfied with the Close-up Survey examination, that there is no structural diminution and the protective coating remains effective.
6.	Transverse bulkhead complete including stiffening system.

Section 6

Special Survey – Bulk carriers – Hull requirements

6.4 Overall Survey

6.4.1 All cargo holds, salt-water ballast tanks including double bottom tanks, pipe tunnels, cofferdams and void spaces bounding cargo holds, decks and outer hull are to be examined, and this examination is to be supplemented by Close-up Survey, thickness measurement and testing as deemed necessary applicable, to ensure that the structural integrity remains effective.

6.7 Thickness measurement

6.7.4 Single skin bulk carriers contracted for construction prior to 1 July 1998 are to undergo a re-assessment and evaluation of their cargo hold shell frames in accordance with the Provisional Rules for Existing Ships. The number of shell frames to be measured is equivalent to number of shell frames subject to close-up survey Close-up Survey (see Table 3.6.1), with representative measurements to be taken at specific areas for each frame. The extent of thickness measurement may be specially considered, but not dispensed with in its entirety, by the Surveyor, provided the structural members indicate no thickness diminution with respect to the Rule thickness and the coating is found in 'as-new' condition (i.e. without breakdown or rusting). Repairs to shell frames are to be based upon the minimum thickness values shown in the evaluation records.

Table 3.6.4 Thickness measurement – Single skin and double skin bulk carriers (Part only shown)

NOTES	
The requirements in this table apply to both single skin and double skin ships unless stated otherwise.	
1.	For areas in spaces where coatings are found to be in GOOD condition, as defined in 1.5, the extent of thickness measurement may be specially considered, but not dispensed with in its entirety. Prior to any coating or re-coating of cargo holds, scantlings are to be confirmed by thickness measurement with the Surveyor in attendance.
2.	Transverse sections should be chosen where the largest reductions are likely to occur, or as revealed by deck plating measurement.
3.	Transverse bulkhead complete including stiffening system.
4.	For ships assigned the notation ESN , the corrugated part of the aft transverse bulkhead of the forward cargo hold is to be subject to thickness measurement. This is to include each vertical corrugation at its lower and middle level including shedder plates and gusset plates, where applicable.
5.	Single skin bulk carriers contracted for construction prior to 1 July 1998 are to undergo a re-assessment of their cargo hold shell frames in accordance with the Provisional Rules for Existing Ships. The number of shell frames to be measured is equivalent to the number of shell frames subject to Close-up survey (see Table 3.6.1), with representative measurements to be taken at specific areas for each frame.

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■ Section 7
**Special Survey – Oil tankers
(including ore/oil ships and
ore/bulk/oil ships) – Hull
requirements**

7.4 Overall Survey

7.4.1 All cargo tanks/cargo holds, and salt-water ballast tanks including double bottom tanks, pump rooms, pipe tunnels, cofferdams and void spaces bounding cargo tanks/cargo holds, deck and outer hull are to be examined, and this examination is to be supplemented by Close-up Survey, thickness measurement and testing as ~~deemed necessary~~ applicable, to ensure that the structural integrity remains effective.

Table 3.7.6 Thickness measurement – Single hull and double hull oil tankers, ore/oil ships and ore/bulk/oil ships
(Part only shown)

NOTES
1. For areas in tanks where coatings are found to be in GOOD condition, as defined in 1.5, the extent of thickness measurements may be specially considered, but not dispensed with in its entirety.
2. Transverse sections should be chosen where the largest reductions are likely to occur, or as revealed by deck plating measurements.
3. Where two or three transverse sections are required to be measured, at least one is to include a ballast tank within 0,5L amidships.
4. Transverse bulkhead complete including stiffening system.
5. All cargo hold hatch covers and coamings, where fitted, are to be measured on ore/oil and ore/bulk/oil ships.
6. For oil tankers (including ore/oil and ore/bulk/oil ships), with length ≥ 130 m and over 10 years of age, the longitudinal strength is to be evaluated. In such cases, a minimum of three transverse sections are to be measured within 0,5L amidships.

■ Section 8
**Special Survey – Chemical tankers –
Hull requirements**

8.4 Overall Survey

8.4.1 All cargo tanks and salt-water ballast tanks including double bottom tanks, pump rooms, pipe tunnels, cofferdams and void spaces bounding cargo tanks, deck and outer hull are to be examined, and this examination is to be supplemented by Close-up Survey, thickness measurement and testing as ~~deemed necessary~~ applicable, to ensure that the structural integrity remains effective.

Table 3.8.4 Thickness measurement – Single and double hull chemical tankers (Part only shown)

NOTES
1. For areas in tanks where coatings are found to be in GOOD condition, as defined in 1.5, the extent of thickness measurements may be specially considered, but not dispensed with in its entirety.
2. Transverse sections should be chosen where the largest reductions are likely to occur, or as revealed by deck plating measurements.
3. Where two or three transverse sections are required to be measured, at least one is to include a ballast tank within 0,5L amidships.
4. Transverse bulkhead complete including stiffening system.

Section 9

Ships for liquefied gases

9.6 Intermediate Surveys

9.6.4 For ships over 10 years of age, an overall survey of all ballast tanks is to be carried out.

- (a) If such examinations reveal no visible structural defects, the examination may be limited to verification that the corrosion prevention system remains in GOOD or FAIR condition.
- ~~(b) For ballast tanks, where a hard protective coating is found to be in POOR condition, as defined in 1.5, where a soft or semi-hard coating has been applied or where a protective coating was not applied from the time of construction the following requirements are applicable:~~
 - ~~(i) For ballast tanks, other than independent double bottom tanks, maintenance of class will be subject to the spaces in question being examined and gauged as necessary at Annual Surveys.~~
 - ~~(ii) For independent double bottom ballast tanks, maintenance of class may be subject to the spaces in question being examined and gauged as necessary at Annual Surveys.~~
- (b) The condition of the corrosion prevention system identified during the Survey may result in the tanks being subject to further examination at Annual Surveys, in accordance with 2.2.28. For independent double bottom ballast tanks, the examination at Annual Surveys will be at the discretion of the Surveyor.

Table 3.9.3 Thickness measurement – Ships for liquefied gases

NOTES

1. For areas in tanks where coatings are found to be in GOOD condition, as defined in 1.5, the extent of thickness measurements may be specially considered, ~~but not dispensed with in its entirety.~~
2. Transverse sections should be chosen where the largest reductions are likely to occur, or as revealed by deck plating measurements.
3. Where two or three transverse sections are required to be measured, at least one is to include a ballast tank within 0,5L amidships.
4. Transverse bulkhead complete including stiffening system.
5. Where considered necessary by the Surveyor, the inner bottom plating and adjacent tank supports are to be subject to thickness measurement for general assessment and recording of the corrosion pattern.
6. For those ships designated to carry light oils in the independent cargo tanks, thickness measurement of the independent cargo tank structure is to be carried out as considered necessary by the Surveyor.

Part 3, Chapter 16

ShipRight Procedures for the Design, Construction and Lifetime Care of Ships

Effective date 1 January 2012

■	<i>Section 11</i> Inventory of hazardous materials
11.1	Inventory of hazardous materials – Descriptive Note IHM
11.1.1	Compliance with this procedure is optional. A ship meeting the requirements of this procedure will be eligible for a ShipRight IHM Descriptive Note, which will be recorded in column 6 of the <i>Register Book</i> , except as indicated in 12.1.2.
11.1.2	If a ship has been assigned the ECO notation, then it will not be eligible for an IHM Descriptive Note. Instead, IHM will be referenced in the ECO notation, i.e. ECO(IHM) .

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